

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 11 and 17 as indicated in the following complete listing of claims.

1. (Currently Amended) A lens driver apparatus comprising:

a body that is to be driven in a direction of an optical axis of a lens and to which said lens is attached,

a guide axis for guiding and allowing the body to move freely in said direction of an optical axis of the lens without turning,

a driving coil that is flatly wound and attached to the body providing a thrust on said body parallel to the direction of the optical axis when a current is provided to said driving coil so that said body moves together with the driving coil in the direction of the optical axis, and

a driving magnet being disposed opposite side of the driving coil and along a direction of movement of the body,

wherein the driving coil and the driving magnet are shaped in curved forms so as to conform to an outer shape of the lens; and

wherein the driving magnet and the driving coil are disposed substantially within only a quadrant circumference of the lens, such that areas substantially corresponding to remaining quadrant circumferences of the lens are free of driving coils for providing thrust to the body in the direction of the optical axis.

2. (Original) The lens driver apparatus according to Claim 1, further comprising:

a yoke curved along a shape of the driving magnet.

3. (Previously Presented) The lens driver apparatus according to Claim 1, further comprising:

a main yoke and an opposite yoke that are disposed so as to face each other with the driving coil in between, and

the main yoke and the opposite yoke are curved so as to match an outer circumferential shape of the lens.

4. (Original) The lens driver apparatus according to Claim 1,

wherein a plurality of the driving coils are provided and disposed adjacent to one another along the moving direction of the body to be driven.

5. (Original) The lens driver apparatus according to Claim 1,

wherein the driving coil is disposed closer to the guide axis on the outer circumference of the lens.

6. (Previously Presented) An image capture apparatus comprising:

a lens driver apparatus according to Claim 1, wherein the lens driver apparatus is disposed in a main casing of the image capture apparatus.

7. (Previously Presented) An image capture apparatus comprising:

a lens driver apparatus according to Claim 2, wherein the lens driver apparatus is disposed in a main casing of the image capture apparatus.

8. (Previously Presented) An image capture apparatus comprising:
a lens driver apparatus according to Claim 3, wherein the lens driver apparatus is disposed in a main casing of the image capture apparatus.

9. (Previously Presented) An image capture apparatus comprising:
a lens driver apparatus according to Claim 4, wherein the lens driver apparatus is disposed in a main casing of the image capture apparatus.

10. (Previously Presented) An image capture apparatus comprising:
a lens driver apparatus according to Claim 5, wherein the lens driver apparatus is disposed in a main casing of the image capture apparatus.

11. (Currently Amended) A lens driver apparatus comprising:
a body that is driven along an optical axis of a lens and to which the lens is attached, said body including a sleeve and a member for accommodating a guide axis;
a guide axis for guiding and allowing the body to move freely in a direction of an optical axis of the lens without turning so that said optical axis is fixed and guiding is performed without shake in the direction of movement,
a driving coil that is flatly wound and attached to the body via a coil fitting part at a position nearer to the sleeve of the body, providing a thrust to said body so that said body moves together with the driving coil in the direction of said optical axis, and
a driving magnet being disposed opposite side of the driving coil and along a direction of movement of the body,

wherein the driving coil and the driving magnet are shaped in curved forms so as to conform to an outer shape of the lens about at least a portion of the optical axis and extending therealong; and

wherein the driving magnet and the driving coil are disposed substantially within a only quadrant circumference of the lens, such that areas substantially corresponding to remaining quadrant circumferences of the lens are free of driving coils for providing thrust to the body in the direction of the optical axis.

12. (Previously Presented) The lens driver apparatus according to Claim 11, further comprising:

a yoke curved along a shape of the driving magnet.

13. (Previously Presented) The lens driver apparatus according to Claim 11, further comprising:

a main yoke and an opposite yoke that are disposed so as to face each other with having the driving coil in between, and

the main yoke and the opposite yoke are curved so as to match an outer circumferential shape of the lens.

14. (Previously Presented) The lens driver apparatus according to Claim 11, wherein a plurality of the driving coils are provided and disposed adjacent to one another along the moving direction of the body to be driven.

15. (Previously Presented) The lens driver apparatus according to Claim 11,

wherein the driving coil is disposed closer to the guide axis on the outer circumference of the lens.

16. (Previously Presented) An image capture apparatus comprising:
a lens driver apparatus according to Claim 1, wherein the lens driver apparatus is disposed in a main casing of the image capture apparatus.

17. (Currently Amended) A lens driver apparatus comprising:
means for driving a body along an optical axis of a lens and to which the lens is attached,
means including a guide axis for guiding and allowing the body to move freely in the direction of an optical axis of the lens without turning,
means, including a driving coil that is flatly wound and attached to the body, for providing a thrust to the body for movement in the direction of said optical axis when said coil is energized, and
a driving magnet being disposed opposite side of the driving coil and along a direction of movement of the body,
wherein the driving coil and the driving magnet are shaped in curved forms that conform to an outer shape of the lens; and
wherein the driving coil and the driving magnet are disposed substantially within only a quadrant circumference of the lens, such that areas substantially corresponding to remaining quadrant circumferences of the lens are free of driving coils for providing thrust to the body in the direction of the optical axis.

18. (Previously Presented) The lens driver apparatus according to Claim 17, further comprising:

a yoke curved along a shape of the driving magnet.

19. (Previously Presented) The lens driver apparatus according to Claim 17, further comprising:

a main yoke and an opposite yoke that are disposed so as to face each other with having the driving coil in between, and

the main yoke and the opposite yoke are curved so as to match an outer circumferential shape of the lens.

20. (Previously Presented) The lens driver apparatus according to Claim 17,

wherein a plurality of the driving coils are provided and disposed adjacent to one another along the moving direction of the body to be driven.